

ABSTRACT OF THE DISCLOSURE

The invention intends to provide a TFT having a gate insulating film which has a high dielectric withstand voltage and can ensure a desired carrier mobility in an adjacent semiconductor active film. A gate electrode and a semiconductor active film are formed on a transparent substrate with a gate insulating film, which is formed of two layered insulating films, held between them. The gate insulating film is made up of a first gate insulating film which improves a withstand voltage between the gate electrode and the semiconductor active film, and a second gate insulating film which improves an interface characteristic between the gate insulating film and the semiconductor active film. The first and second gate insulating films are each formed of a SiN_x film. The optical band gap of the first gate insulating film has a value in the range of 3.0 to 4.5 eV, and the optical band gap of the second gate insulating film has a value in the range of 5.0 to 5.3 eV.

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